



Robert Greene Sterne
Edward J. Kessler
Jorge A. Goldstein
David K.S. Cornwell
Robert W. Esmond
Tracy-Gene G. Durkin
Michele A. Cimbala
Michael B. Ray
Robert E. Sokohl
Eric K. Steffe
Michael Q. Lee
Steven R. Ludwig
John M. Covert
Linda E. Alcorn
Robert C. Miltonig
Donald J. Featherstone
Timothy J. Shea, Jr
Lawrence B. Bugaisky
Michael V. Messenger
Judith U. Kim

Patrick E. Garrett
Jeffrey T. Helvey
Heidi L. Kraus
Eldora L. Ellison
Thomas C. Fiala
Albert L. Ferro
Donald R. Banowitz
Peter A. Jackman
Teresa U. Medler
Jeffrey S. Weaver
Kendrick P. Patterson
Vincent L. Capuano
Brian J. Del Buono
Virgil Lee Beaton
Theodore A. Wood
Elizabeth J. Haanes
Joseph S. Ostroff
Frank R. Cottingham
Christine M. Lhulier

Rae Lynn P. Guest
George S. Bardmesser
Daniel A. Klein
Jason D. Eisenberg
Michael D. Specht
Andrea J. Kamage
Tracy L. Muller
Jon E. Wright
LuAnne M. DeSantis
Ann E. Summerfield
Aric W. Ledford
Helene C. Carlson
Cynthia M. Bouchez
Timothy A. Doyle
Gaby L. Longworth
Lori A. Gordon
Nicole D. Dretar
Ted J. Ebersole
Jyoti C. Iyer

Laura A. Vogel
Michael J. Mancuso
Bryan S. Wade
Aaron L. Schwartz
Michael G. Penn
Matthew E. Kelley
Shannon A. Carroll
Nicole R. Kramer

Registered Patent Agents*
Karen R. Markowicz
Nancy J. Leith
Matthew J. Dowd
Katrina Yujian Pei Quach
Bryan L. Skelton
Robert A. Schwartzman
Teresa A. Colella
Jeffrey S. Lundgren
Victoria S. Rutherford

Michelle K. Holoubek
Simon J. Elliott
Julie A. Heider
Mita Mukherjee
Scott M. Woodhouse
Christopher J. Walsh
Liliana Di Nola-Baron
Peter A. Socarras

Of Counsel
Kenneth C. Bass III
Evan R. Smith
Marvin C. Guthrie
*Admitted only in Maryland
*Admitted only in Virginia
*Practice limited to Federal Agencies

April 8, 2005

WRITER'S DIRECT NUMBER:
(202) 772-8675
INTERNET ADDRESS:
JHELVEY@SKGF.COM

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Art Unit 2634

Re: U.S. Utility Patent Application
Application No. 09/590,955; Filed: June 9, 2000
For: **Phase Shifting Applications of Universal Frequency Translation**
Inventors: Johnson *et al.*
Our Ref: 1744.0710005

Sir:

Transmitted herewith for appropriate action are the following documents:

1. SKGF Cover Letter;
2. Fifth Supplemental Information Disclosure Statement;
3. Form PTO-1449 (3 pages);
4. Return postcard; and
5. PTO-2038 Credit Card Payment Form for \$180.00 to cover:
\$180.00 for IDS Late Filing Surcharge.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

04/12/2005 HAL111 00000057 09590955

01 FC:1806

180.00 OP

Commissioner for Patents
April 8, 2005
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey T. Helvey
Attorney for Applicants
Registration No. 44,757

JTH/agj
384972_1.DOC



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Johnson *et al.*

Appl. No.: 09/590,955

Filed: June 9, 2000

For: **Phase Shifting Applications of
Universal Frequency Translation**

Confirmation No.: 2387

Art Unit: 2634

Examiner: Odom, Curtis B.

Atty. Docket: 1744.0710005

Fifth Supplemental Information Disclosure Statement

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this Fifth Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Fourth Supplemental Information Disclosure Statement filed on November 2, 2004 in connection with the above-captioned application.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

Applicants provide the following comments regarding the documents:

Documents AA59, AF59, AC60, and AC61 are co-owned patents which are directed to related subject matter.

Documents AA59, AD60-AI60, AA61, and AB61 were cited in an Office Action in related U.S. Patent Application No. 09/855,851, filed May 16, 2001, entitled "Apparatus, System, and Method for Down-Converting and Up-Converting Electromagnetic Signals," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,465,415, 6,049,706, 6,061,551, 6,580,902, and 6,687,493, all of which have already been cited in the present application.

Documents AB59 and AC59 were cited in an Office Action in related U.S. Patent Application No. 10/289,377, filed November 7, 2002, entitled "Method and Apparatus for Reducing DC Offsets in a Communication System," directed to related subject matter.

Document AD59 was cited in a Notice of Allowance in related U.S. Patent Application No. 10/197,441, filed July 18, 2002, entitled "Method and System for Frequency Up-Conversion With a Variety of Transmitter Configurations," directed to related subject matter.

Document AE59 was cited in an Office Action in related U.S. Patent Application No. 10/086,250, filed March 4, 2002, entitled "Applications of Universal Frequency Translation," directed to related subject matter.

Document AG59 was cited in an Office Action in related U.S. Patent Application No. 09/569,045, filed May 10, 2000, entitled "Method and Apparatuses Relating to a

Universal Platform Module and Enabled by Universal Frequency Translation Technology," directed to related subject matter.

Documents AH59, AI59, AA60, and AB60 were cited in a Notice of Allowance in related U.S. Patent Application No. 09/770,675, filed January 29, 2001, entitled "Wireless and Wired Cable Modem Applications of Universal Frequency Translation Technology," directed to related subject matter.

This statement should not be construed as a representation that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☐ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.
- ☒ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.

- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☒ c. Attached is our PTO-2038 Credit Card Payment Form in the amount of \$180.00 in payment of the fee under 37 C.F.R. § 1.17(p).
- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure

Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.
- ☐ 6. A concise explanation of the relevance of the non-English language document(s) appears below in accordance with 37 C.F.R. § 1.98(a)(3).
- ☒ 7. In accordance with 37 C.F.R. § 1.98(a)(2), no copies of U.S. patents and patent application publications cited on the attached Form PTO-1449 are submitted.
- ☐ 8. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. _____, filed

_____, which is relied upon for an earlier filing date under 35 U.S.C.

§ 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

- ☐ 9. It is expected that the examiner will review the prosecution and cited art in the parent application no. _____, filed _____, in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution histories have been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed Form PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey T. Helvey
Attorney for Applicants
Registration No. 44,757

Date: 7/8/05

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

FORM PTO-1449

ATTY. DOCKET NO.
1744.0710005APPLICATION NO.
09/590,955FIFTH SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENTINVENTORS
Johnson *et al.*FILING DATE
June 9, 2000ART UNIT
2387

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA59	6,813,485 B2	11/2004	Sorrells <i>et al.</i>			
	AB59	5,410,270	04/1995	Rybicki <i>et al.</i>			
	AC59	6,509,777 B2	01/2003	Razavi <i>et al.</i>			
	AD59	5,982,329	11/1999	Pittman <i>et al.</i>			
	AE59	6,208,636 B1	03/2001	Tawil <i>et al.</i>			
	AF59	6,836,650 B2	12/2004	Sorrells <i>et al.</i>			
	AG59	5,844,868	12/1998	Takahashi <i>et al.</i>			
	AH59	6,385,439 B1	05/2002	Hellberg			
	AI59	6,741,139 B2	05/2004	Pleasant <i>et al.</i>			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER INITIAL	DOC. REF.	CITATION
	AN	
	AO	
	AP	
	AQ	
	AR	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

ATTY. DOCKET NO.
1744.0710005APPLICATION NO.
09/590,955FIFTH SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENTINVENTORS
Johnson *et al.*FILING DATE
June 9, 2000ART UNIT
2387

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA60	6,823,178 B2	11/2004	Pleasant <i>et al.</i>			
	AB60	6,850,742 B2	02/2005	Fayyaz			
	AC60	6,853,690 B1	02/2005	Sorrells <i>et al.</i>			
	AD60	4,789,837	12/1988	Ridgers			
	AE60	5,634,207	05/1997	Yamaji <i>et al.</i>			
	AF60	5,642,071	06/1997	Sevenhans <i>et al.</i>			
	AG60	6,211,718 B1	04/2001	Souetinov			
	AH60	6,212,369 B1	04/2001	Avasarala			
	AI60	6,308,058 B1	10/2001	Souetinov <i>et al.</i>			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER INITIAL	DOC. REF.	CITATION
	AN	
	AO	
	AP	
	AQ	
	AR	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

FIFTH SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
1744.0710005APPLICATION NO.
09/590,955INVENTORS
Johnson *et al.*FILING DATE
June 9, 2000ART UNIT
2387

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA61	6,633,194 B2	10/2003	Arnborg <i>et al.</i>			
	AB61	2001/0036818 A1	11/2001	Dobrovolny			
	AC61	6,873,836 B1	03/2005	Sorrells <i>et al.</i>			
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER INITIAL	DOC. REF.	CITATION
	AN	
	AO	
	AP	
	AQ	
	AR	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.